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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,853	02/09/2007	Gen-Ichiro Soma	060208	9265
23850 7590 01/24/2008 KRATZ, QUINTOS & HANSON, LLP 1420 K Street, N.W. Suite 400 WASHINGTON, DC 20005			EXAMINER MI, QIUWEN	
			ART UNIT 1655	PAPER NUMBER
			MAIL DATE 01/24/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/572,853	<b>Applicant(s)</b> SOMA ET AL.	
	<b>Examiner</b> Qiuwen Mi	<b>Art Unit</b> 1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 16-38 is/are pending in the application.
- 4a) Of the above claim(s) 1-11, 23-25 and 30-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-14, 16-22, 26-29 and 33-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### **Election/Restrictions**

Applicant's election with traverse of claims 12-14, 16-22, 26-29, and 33-38 in the reply filed on 11/29/07 is acknowledged. The traversal is on the ground(s) that *Bacillus natto* and *Bacillus subtilis* are gram-positive bacterium, which is different from gram-negative bacterium of claim 1. This is found persuasive. However, since Nagano et al teach the leavening bacterium *Enterobacter cloacae* GAO (gram-negative) made dough (wheat flour powder with water, thus a plant extract) rise (fermented). The GAO plus yeast mixture was allowed to ferment from 20 to 25% of the time for the GAO alone. The ratio of 0.5% yeast volume to wheat flour (edible plant) was acceptable (see Abstract). According to dictionary.com, glucide means any of various organic compounds that consist of or contain a carbohydrate, thus wheat flour inherently contains glucide and polysaccharide), therefore, there is no special technical feature in the application. Accordingly the groups are not so linked as to form a single general concept under PCT Rule 13.1., and therefore lack of unity of invention exists.

### **Claims Pending**

Claims 1-14, and 16-38 are pending. Claims 1-11, 23-25, and 30-32 are withdrawn as they are directed toward a non-elected invention groups or species. Claims 12-14, 16-22, 26-29, and 33-38 are examined on the merits.

### Claim Rejections –35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12-14, 16-22, 26-29, and 33-38 are rejected under 35 USC § 102 (b) as being anticipated by Nagano et al (Characteristics of wheat-flour dough using *Enterobacter cloacae* GAO with and without yeast, Journal of Food Science 56 (1): 106-108, 1991).

Nagano et al teach the leavening bacterium *Enterobacter cloacae* GAO (gram-negative) made dough (wheat flour powder with water, thus a plant extract) rise (fermented). The GAO plus yeast mixture was allowed to ferment from 20 to 25% of the time for the GAO alone. The ratio of 0.5% yeast volume to wheat flour (edible plant) was acceptable (see Abstract). According to dictionary.com, glucide means any of various organic compounds that consist of or contain a carbohydrate, thus wheat flour inherently contains glucide and polysaccharide).

The intended use of the composition in claims 16, and 18-22 was analyzed for patentable weight. It is deemed that the preamble ‘breathes life’ into the claims in that the prior art product must not be precluded for use as food, bath agent, pharmaceutical composition, for macrophage activation, or has an immunopotential activity. It is deemed that the composition disclosed by Nagano et al. is not precluded for carrying out the intended function of the claims.

Therefore, the reference is deemed to anticipate the instant claim above.

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**Conclusion**

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qiuwen Mi whose telephone number is 571-272-5984. The examiner can normally be reached on 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Qiuwen Mi

  
MICHELE FLOOD  
PRIMARY EXAMINER

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :6/22/2006; 1/31/2007; 6/26/2007.